MENU PLANNING
Hope Wrenn, RD, LDN, SNS
# Lunch Meal Pattern

<table>
<thead>
<tr>
<th>Meal Pattern</th>
<th>Grades K-5</th>
<th>Grades 6-8</th>
<th>Grades 9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits (cups)²</td>
<td>2.5 (0.5)</td>
<td>2.5 (0.5)</td>
<td>5 (1)</td>
</tr>
<tr>
<td>Vegetables (cups)²</td>
<td>3.75 (0.75)</td>
<td>3.75 (0.75)</td>
<td>5 (1)</td>
</tr>
<tr>
<td>Dark green²</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Red/Orange²</td>
<td>0.75</td>
<td>0.75</td>
<td>1.25</td>
</tr>
<tr>
<td>Beans and peas (legumes)²</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Starchy²</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Other²,d</td>
<td>0.5</td>
<td>0.5</td>
<td>0.75</td>
</tr>
<tr>
<td>Additional Veg to Reach Total²</td>
<td>1</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Grains (oz eq)²</td>
<td>8-9 (1)</td>
<td>8-10 (1)</td>
<td>10-12 (2)</td>
</tr>
<tr>
<td>Meats/Meat Alternates (oz eq)</td>
<td>8-10 (1)</td>
<td>9-10 (1)</td>
<td>10-12 (2)</td>
</tr>
<tr>
<td>Fluid milk (cups)²</td>
<td>5 (1)</td>
<td>5 (1)</td>
<td>5 (1)</td>
</tr>
</tbody>
</table>

**Other Specifications: Daily Amount Based on the Average for a 5-Day Week**

| Min-max calories (kcal)³        | 550-650    | 600-700    | 750-850     |
| Saturated fat (% of total calories)³ | < 10      | < 10      | < 10        |
| Sodium (mg)³                    | ≤ 640      | ≤ 710      | ≤ 740       |
| **Trans fat**                    | Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving. |
Menu Planning/Age/Grade Groups

- A single food-based menu planning approach

- New Age/Grade Groups for Lunch
  - Grades K -5
  - Grades 6-8
  - Grades 9-12
  - NO allowance for schools one grade over or under
Definitions

**Food Component** = one of the five food groups which comprise reimbursable meals

- Meat/meat alternate
- Grains
- Vegetables
- Fruits
- Milk
Definitions

**Food Item** = specific food offered within the five food components

Examples: strawberries
hamburger
broccoli florets
# Milk Component

<table>
<thead>
<tr>
<th>Meal Pattern</th>
<th>Grades K-5</th>
<th>Grades 6-8</th>
<th>Grades 9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid milk (cups)¹</td>
<td>5 (1)</td>
<td>5 (1)</td>
<td>5 (1)</td>
</tr>
</tbody>
</table>

¹Minimum amount per day
Milk Component

- Allowable milk options:
  - Fat-free (unflavored or flavored)
  - Low-fat (unflavored only)
  - Fat-free or low-fat (lactose-reduced or lactose-free)

- Must offer at least two choices

- Does not alter nutrition standards for milk substitutes (e.g., soy beverages)

- Milk provisions also apply to children ages 3-4
# Meats/Meat Alternates (Lunch)

<table>
<thead>
<tr>
<th>Lunch Meal Pattern</th>
<th>Grades K-5</th>
<th>Grades 6-8</th>
<th>Grades 9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meal Pattern</td>
<td>Amount of Food Per Week (Minimum Per Day)</td>
<td>8-10 (1)</td>
<td>9-10 (1)</td>
</tr>
<tr>
<td>Meats/Meat Alternates (oz eq)</td>
<td>8-10 (1)</td>
<td>9-10 (1)</td>
<td>10-12 (2)</td>
</tr>
</tbody>
</table>
Meats/Meat Alternates (Lunch)

- Daily and weekly requirements for lunch only
  - 2 oz eq. daily for students in grades 9-12
  - 1 oz eq. daily for younger students
- A variety of meat/meat alternates is encouraged
- Tofu and soy yogurt will be allowable as meat alternate
- See memo SP-16-2012, Crediting Tofu and Soy Yogurt Products
Grains (Lunch)

<table>
<thead>
<tr>
<th>Lunch Meal Pattern</th>
<th>Grades K-5</th>
<th>Grades 6-8</th>
<th>Grades 9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meal Pattern</td>
<td>Amount of Food^b Per Week (Minimum Per Day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grains (oz eq)</td>
<td>8-9 (1)</td>
<td>8-10 (1)</td>
<td>10-12 (2)</td>
</tr>
</tbody>
</table>
Grains (Lunch)

• Schools must offer the daily and weekly serving ranges of grains
  • Maximums and minimums
• Initially, at least ½ of grains offered during the week must be whole grain-rich
• Beginning in SY 2014-15, all grains offered must be whole grain-rich
  • “Whole grain-rich” foods must contain at least 50 percent whole grains
Criteria for Whole Grain-Rich Foods

- Meet the serving size requirements in the Grains/Breads Instruction, and

- Meet at least one of the following:
  - Whole grains per serving must be $\geq 8$ grams
  - Product includes FDA’s whole grain health claim on its packaging
  - Product ingredient listing lists whole grain first (HUSSC criteria)
Grains (Lunch)

- Grain-Based Desserts
  - Only two creditable grain-based desserts allowed at lunch per school week
  - These items are a major source of solid fats and added sugars per DGA 2010
# Fruits (Lunch)

<table>
<thead>
<tr>
<th>Meal Pattern</th>
<th>Grades K-5</th>
<th>Grades 6-8</th>
<th>Grades 9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits (cups)</td>
<td>2.5 (0.5)</td>
<td>2.5 (0.5)</td>
<td>5 (1)</td>
</tr>
</tbody>
</table>
Vegetables (Lunch)

- A daily serving that reflects variety over the week
- Vegetable subgroup **weekly** requirements for:
  - Dark Green (e.g., broccoli, collard greens, spinach)
  - Red/Orange (e.g., carrots, sweet potatoes, tomatoes)
  - Beans/Peas (Legumes) (e.g., kidney beans, lentils, chickpeas)
  - Starchy (e.g., corn, green peas, white potatoes)
  - Other (e.g., onions, green beans, cucumbers)
  - Additional vegetables to meet 5 cup weekly total
## Vegetables (Lunch)

<table>
<thead>
<tr>
<th>Meal Pattern</th>
<th>Lunch Meal Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grades K-5</td>
</tr>
<tr>
<td>Vegetables (cups)</td>
<td>3.75 (0.75)</td>
</tr>
<tr>
<td>• Dark green</td>
<td>0.5</td>
</tr>
<tr>
<td>• Red/Orange</td>
<td>0.75</td>
</tr>
<tr>
<td>• Beans/Peas (Legumes)</td>
<td>0.5</td>
</tr>
<tr>
<td>• Starchy</td>
<td>0.5</td>
</tr>
<tr>
<td>• Other</td>
<td>0.5</td>
</tr>
<tr>
<td>Additional Veg to Reach Total</td>
<td>1</td>
</tr>
</tbody>
</table>
Nutrient Requirements
Four Dietary Specifications

- Weekly average requirements
  - Calories
  - Sodium
  - Saturated fat

- Daily requirement
  - Trans fat
Calorie Ranges

- Minimum and maximum calorie (kcal) levels
  - Average over course of the week
- Effective SY 2012-13 for NSLP
- Grade Level K-5 (ages 5-10)
  - Lunch: 550-650
- Grade level 6-8 (ages 11-13)
  - Lunch: 600-700
- Grade Level 9-12 (ages 14-18)
  - Lunch: 750-850
# Sodium

## Sodium Limits and Timeline

<table>
<thead>
<tr>
<th>Target 1: SY 2014-15</th>
<th>Target 2: SY 2017-18</th>
<th>Final target: SY 2022-23</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lunch</strong></td>
<td><strong>Lunch</strong></td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td>≤1230mg (K-5)</td>
<td>≤935mg (K-5)</td>
<td>≤640mg (K-5)</td>
</tr>
<tr>
<td>≤1360mg (6-8)</td>
<td>≤1035mg (6-8)</td>
<td>≤710mg (6-8)</td>
</tr>
<tr>
<td>≤1420mg (9-12)</td>
<td>≤1080mg (9-12)</td>
<td>≤740mg (9-12)</td>
</tr>
</tbody>
</table>
Saturated Fat

- Limit saturated fat
  - Less than 10 percent of total calories
  - Same as current regulatory standard
- No total fat standard
Trans Fat

• New trans fat restriction

• Nutrition label or manufacturer’s specifications must specify zero grams of trans fat per serving (less than 0.5 gram per serving)
  – Begins SY 2012-2013 for NSLP

• Naturally-occurring trans fat excluded
  • e.g., beef, lamb, dairy products
Overview for Procurement
Cleaner Food Labels
Prohibiting certain food additives. Currently 10 food additives have been identified to eliminate from menu items. Preservatives, artificial sweeteners, colorings, seasoning and hydrogenated oils are targeted for elimination from all new items and systematically eliminated from existing items.

- High Fructose Corn Syrup
- Trans fats
- MSG
- Artificial Colors
- Caramel Colors (unless a plant based product)
- Artificial Sweeteners
- Potassium Bromate
- Sodium Benzonate
- BHA
- TBHQ
- Azodicarbonamide
- Propyl Gallate

Eliminating TVP and soy are also paramount in establishing cleaner labels. Eliminating these additives is a short term goal.

Meats will not contain hormones, antibiotics, be genetically modified or have been subjected to irradiation or ammonia in the processing phase.

Meal Accommodations
Pork will not be offered in any form.
Medically documented food restrictions will be accommodated.

Snacks and Beverages
All snack items offered will have a clean label and meet or exceed USDA smart snack guidelines.

Locally Sourced Food
To the extent possible locally sourced products are purchased. Locally sourced is defined as located within a 200 mile radius.
#1: Foods must fall into one of these categories:
- Be whole grain-rich (≥50% whole grain by weight, or listed as first ingredient)
- First ingredient must be: fruit, vegetable, dairy product or protein food
- Be a combination of food that consists of ≥¼ cup of fruit and/or vegetable
- Contain at least 10% of the Daily Value of some nutrient of public health concern: calcium, potassium, vitamin D, or dietary fiber (on 7/1/16, this criterion will expire)

#2: If the food qualifies as one of the above, it must also meet all of these standards:

<table>
<thead>
<tr>
<th>Calories</th>
<th>Sodium</th>
<th>Fats</th>
<th>Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snack / Side Dish</td>
<td>Entrees</td>
<td>Snack / Side Dish</td>
<td>Entrees</td>
</tr>
<tr>
<td>≤ 200 cal</td>
<td>≤ 350 cal</td>
<td>≤ 230 mg</td>
<td>After 7/1/16: ≤ 200 mg</td>
</tr>
</tbody>
</table>

Beverages must meet these standards:

<table>
<thead>
<tr>
<th>Beverages</th>
<th>Elementary</th>
<th>Middle</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain Water or Plain Carbonated Water</td>
<td>Any Size</td>
<td>Any Size</td>
<td>Any Size</td>
</tr>
<tr>
<td>Low-fat Milk, Unflavored</td>
<td>≤ 8 fl oz</td>
<td>≤ 12 fl oz</td>
<td>≤ 12 fl oz</td>
</tr>
<tr>
<td>Non-fat Milk, Flavored or Unflavored</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% Fruit/Vegetable Juice</td>
<td>≤ 8 fl oz</td>
<td>≤ 12 fl oz</td>
<td>≤ 12 fl oz</td>
</tr>
<tr>
<td>100% Fruit/Vegetable Juice — diluted</td>
<td>≤ 8 fl oz</td>
<td>≤ 12 fl oz</td>
<td>≤ 12 fl oz</td>
</tr>
<tr>
<td>with water, with or without carbonation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with no added sweeteners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Flavored and/or Carbonated Beverages—soda is not allowed</td>
<td>Not Allowed</td>
<td>Not Allowed</td>
<td>Not Allowed</td>
</tr>
<tr>
<td>Caffeine, beyond naturally-occurring</td>
<td>Not Allowed</td>
<td>Not Allowed</td>
<td>Not Allowed</td>
</tr>
<tr>
<td>trace amounts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adopted by the Maryland State Board of Education on June 27, 2014
Vegetarian Menu

* Veggie Flat Out
* Falafel on flatbread w/tzatziki sauce
* Veggie burger
* Hummus plate
* Veggie wrap
Presentation

Focusing on presentation training
Presentation

Fun addition to serving line
SAMPLE PLATE
Online Resources

- https://www.federalregister.gov/
- https://www.healthiergeneration.org/take_action/schools/snacks_and_beverages/smart_snacks/link_to_the_alliance_product_calculator/
PLATE WASTE
Accountability
MEAL OR NO MEAL
Questions are guaranteed in life; Answers aren't.